Serial Number: 09/582;341

Atty. Ref. No.: 010100-101

CERTIFICATE OF MAILING

I hereby certify that this correspondence and all identified attachments are

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ommissioner for Patents

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lexandria, VA

Ву:

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Patent

Graham Alexander Munro MURDOCH,

Examiner:

D. Pope

Application Of: Serial Number:

09/582,341

Filed:

August 22, 2000

Group Art Unit:

2632

Title:

TRANSMITTER AND A METHOD FOR

TRANSMITTING DATA

Stuart Colin LITTLECHILD

Commissioner for Patents P.O. Box 1450

Alexandria, VA 22313-1450

SECOND REQUEST FOR RECONSIDERATION OF HOLDING OF ABANDONMENT

Sir:

Applicant hereby requests reconsideration of the finding of abandonment for failure to respond to the Office Action dated January 18, 2001. Applicant's response entitled Response to Office Action Dated January 18, 2001, was filed July 24, 2001, along with a Petition for a three month extension of time. A copy of the response and extension of time are attached hereto as Exhibit 1, along with a copy of the stamped return post card showing the filing on that date.

Serial Number: 09/582,341 Atty. Ref. No.: 010100-101

Applicant filed with the Examiner by fax a first REQUEST FOR RECONSIDERATION OF HOLDING OF ABANDONMENT on September 29, 2003. A copy of the facsimile confirmation sheet is Attached as Exhibit 2.

Reconsideration of the Finding of abandonment and reconsideration of the January 18, 2001 rejection in view of Applicant's response is respectfully requested.

Please charge any additional fee that may be due or credit any overpayment to our deposit Account No. 50-0655. A duplicate copy of this Request is enclosed.

Respectfully submitted,

Dated: January 21, 2004

∕james A. Henricks Registration No. 31,168

HENRICKS, SLAVIN & HOLMES LLP

840 Apollo Street, Suite 200 El Segundo, CA 90245-4737 310-563-1456 310-563-1460 (fax) jhenricks@hsh-iplaw.com (Email)

PATENT

Atty. Ref. No.: 010100-101

CERTIFICATE OF MAILING

I hereby certify that this correspondence and all identified attachments are being deposited on July 18, 2001 with the United States Postal Service as first class mail in an envelope/with sufficient postage addressed to:

Commissioner of Patents

Washington, D.C. 20231

ames A. Henricks,

Applicant: MURDOCH ET AL.

Serial No.: 09/582,341

Filed: December 24, 1998

Title: A TRANSMITTER AND A METHOD FOR TRANSMITTING DATA

Examiner: Pope, D.

Group Art Unit: 2632

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

oner of Patents
in, D.C. 20231

Commissioner of Patents Washington, D.C. 20231

DATED JANUARY 18, 2001

Sir:

In response to the Office Action dated January 18, 2001, identified as paper No. 5, and having a shortened statutory response period ending April 18, 2001, please consider the following amendments and remarks

In the Claims

Please amend the claims as follows:

- 47. (Amended) A system according to claim 46 for identifying luggage.
- 66. (Amended) A system according to claim 65 configured for identifying luggage/

REMARKS

This application is a Section 371 of PCT/AU98/01077. New claims 35-68 are pending in the application and stand rejected. Original claims 1-34 have been canceled. Applicant notes with appreciation the Notice of References Cited, PT0-892, but there is no indication of any consideration of Applicants' Information Disclosure Statement filed concurrently with the section 371 documents. A copy of the Information Disclosure Statement and its enclosures is submitted herewith for consideration.

Claims 35-68 are all rejected under 35 U.S.C. 102 (e) as being allegedly anticipated by Kumar, U.S. Patent No. 6,005,894. In the rejection, the Examiner states that in Kumar, "the claimed providing a carrier signal, imposing a phase modulation of less than 90 degrees to create side bands of substantially lower amplitude, and providing a modulated signal to an antenna is met (see: column 19, lines 36 et seq.; col. 20, lines 1 et seq, sometimes noted as [19:36])."

Applicants respectfully traverse the rejection and request reconsideration of the claims in view of the following remarks.

Consider first Applicants' disclosure. According to one aspect of one of the present inventions, methods and apparatus are provided for transmitting data from a first antenna wherein the data is modulated, for example in a modulating circuit such as that shown in FIG. 7. In one preferred method, a carrier signal is provided and a phase modulation of less than 90 degrees is imposed on the carrier signal in accordance with a data signal to create a modulated signal. The modulated signal has a carrier frequency and side bands, and the side bands are substantially lower in amplitude than the carrier frequency. The modulated signal is then sent to a first antenna for transmission. Apparatus is also provided for phase modulation of a carrier signal, for example phase modulating the carrier signal by less than 90 degrees.

In accordance with a further aspect of one of the present inventions, the modulated signal is received with a second antenna, and a first signal is thereby produced and provided to a receiver for deriving a second signal representing the data signal. In one preferred form, the first signal is used to power the receiver, so that the receiver is a passive receiver. This allows the power transmission to be very efficient without any reduction in power transmission due to

modulation. It also allows transmission of data at very high speeds while maintaining low level sidebands, for example for conforming to emissions regulations.

In another form of one of the present inventions, methods and apparatus are described for providing a carrier signal and imposing a phase modulation on the carrier signal in accordance with a data signal to create a modulated signal having a carrier and side bands. The amount of phase modulation is selected such that the amplitude of the side bands is substantially lower than that of the carrier.

Consider now the reference relied upon by the Examiner. Kumar shows an AMcompatible digital broadcasting method and system, such as for the terrestrial radio frequency broadcast and reception of a digitally encoded signal together with an analog signal in the conventional AM-band of broadcast frequencies. Kumar provides descriptions of a number of prior art methods, and provides descriptions of a number of embodiments for purportedly carrying out the intended method. As noted above, the Examiner refers to text at column 19, lines 36 et seq., and column 20, lines 1, et seq. However, the Examiner does not refer to any language that discusses, for example, phase modulation of less than 90 degrees on a carrier signal with a data signal to create a modulated signal having a carrier frequency and side bands where the side bands are substantially lower in amplitude and carrier frequency. Additionally, it is not seen where Kumar teaches or suggests phase modulation of a carrier signal at less than 90 degrees. It appears that Kumar modulates signals in phase or in quadrature. For example, in FIG. 12, signals are modulated where I is in phase and Q is in quadrature, and the carrier signals are modulated in phase or in quadrature. However, for the embodiment of FIG. 11 and the text referenced by the Examiner, the apparatus or process to which the Examiner refers as demonstrating Applicants' claimed inventions does not appear to even suggest any modulation other than in phase or in quadrature. No anticipation can be seen from Kumar.

In other parts of *Kumar*, there are numerous references to modulating signals in phase or in quadrature. For example, FIG. 10 refers to quadrature amplitude modulation [14:55] and FIG. 12 refers to in phase and quadrature signals [15:4-5; 21:50-51; 21:65 - 22:1]. See also the text at [23:30-41], [25: 43-50], [28: 19-25], and [28: 57-61]. In fact, *Kumar* may appear to teach away from Applicants' inventions. For example, *Kumar* states that inner and outer side band regions have frequency-orthogonality [11: 59], and because orthogonality means phase-quadrature [6:

38-40], it appears that the *Kumar* signals are either in phase or phase quadrature, and even though there may not be a requirement for a specific phase relationship, the side bands are coherent [11:58-65]. Therefore, it is not believed that anything in *Kumar* teaches or suggests, let alone anticipates, Applicants' inventions, and it may even teach away from the inventions.

Consider now several of the claims in the present application. Claim 35 is an independent method claim reciting in part:

"providing a carrier signal;

"imposing a phase modulation of less than 90° on the carrier signal in accordance with a data signal to create a modulated signal having a carrier frequency and sidebands, the sidebands being substantially lower in amplitude than the carrier frequency; and

"providing the modulated signal to said first antenna for transmission." Nothing in *Kumar* teaches or suggests imposing a phase modulation of less than 90 degrees on a carrier signal in accordance with a data signal to create a modulated signal having a carrier frequency and side bands, the side bands being substantially lower in amplitude than the carrier frequency. The Examiner has failed to identify how *Kumar* anticipates claim 35. *Kumar* may even teach away from the claimed inventions.

Claims 36-39 are claims dependent directly or indirectly from independent claim 35 and are asserted as being patentable for the same reasons as were discussed above with respect to claim 35, for the additional limitations contained in the dependent claims as well as for the combinations claimed in the dependent claims. Note for example claim 37 reciting in part "wherein the first signal is used to power the receiver means." Applicants have been unable to locate any teaching or suggestion in *Kumar* that even mentions this feature. It is unclear how *Kumar* anticipates these dependent claims.

Claim 40 is an independent apparatus claim and recites in part:

"a first antenna;

"oscillator means for providing a carrier signal; and

"mixing means for imposing a phase modulation of less than 90° on the carrier signal in accordance with a data signal to create a modulated signal, the mixing means also providing the modulated signal to the first antenna for transmission, wherein the modulated signal has a carrier frequency and sidebands, the sidebands being substantially lower in amplitude than the carrier frequency."

Nothing in *Kumar* teaches or suggests any apparatus for imposing a phase modulation of less than 90 degrees on the carrier signal in accordance with a data signal to create a modulated signal, and mixing means also providing the modulated signal to the first antenna for transmission, wherein the modulated signal has a carrier frequency and side bands, the side bands being substantially lower in amplitude than the carrier frequency. It is not seen how *Kumar* anticipates or even renders obvious claim 40.

Claims 41-47 are apparatus claims dependent directly or indirectly from independent claim 40 and are asserted as being patentable for the same reasons as were discussed above with respect to claim 40, for the additional limitations contained in the dependent claims as well as for the combinations claimed in the dependent claims. Note in particular claim 42 reciting in part "wherein the first signal is used to power the receiver means." Note claim 45 reciting in part "wherein the antenna is a tunable coil." Note claim 47 reciting in part a system for identifying luggage.

Claims 48-68 are independent and dependent claims that are patentable for reasons similar to those discussed above. *Kumar* fails to anticipate or even render obvious the claims in the present application.

Reconsideration of the application and claims in view of the foregoing amendments and remarks is respectfully requested. Early notice of allowance thereof is earnestly solicited.

Please charge any additional fees that may be due or credit any overpayments to our deposit Account No. 50-0655. A duplicate copy of this document is enclosed.

This response is being filed with a three-month extension of time.

Respectfully submitted,

Dated: July 18, 2001

James A. Henricks Registration No. 31,168

HENRICKS, SLAVIN & HOLMES LLP

840 Apollo Street, Ste. 200 El Segundo, CA 90245-4737 310-563-1456 310-563-1460 (fax) jhenricks@hsh-iplaw.com (Email)

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims

Claims 47 and 66 have been amended as follows:

47. (Amended) A system according to claim 46 48 for identifying luggage.

66. (Amended)...A system according to claim 65 67 configured for identifying luggage.

Serial Number: 09/582,341

Atty. Ref. No.: 010100-101

PATENT '

CERTIFICATE OF MAILING

I hereby certify that this correspondence and all identified attachments are being deposited on July 18, 2001 with the United States Postal Service as first class mail in an envelope with sufficient postage addressed to:

> Commisioner of Patents Washington, D.C. 20231

By: A Henricks 21 169

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Patent

Graham Alexander Munro MURDOCH.

Examiner:

D. Pope

Application Of:

Stuart Colin LITTLECHILD

Serial Number:

09/582,341

Filed:

August 22, 2000

Group Art Unit:

2632

Title:

TRANSMITTER AND A METHOD FOR

TRANSMITTING DATA

Commissioner of Patents Washington, D.C. 20231

PETITION FOR EXTENSION OF TIME TO RESPOND

PURSUANT TO 37 C.F.R. § 1.136

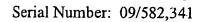
Sir:

Applicant hereby petitions the Commissioner of Patents and Trademarks for a three - month extension of time to respond to the Office Action dated January 18, 2001.

The new due date will be: July 18, 2001.

Applicant is a small entity; accordingly submitted herewith is our check:

Check No.: 2484 Amount : \$445.00.



Atty. Ref. No.: 010100-101

This Petition is being filed simultaneously with a Response to Office Action dated January 18, 2001 and Amendment Transmittal.

Please charge any additional fee that may be due or credit any overpayment to our deposit Account No. 50-0655. A duplicate copy of this Petition is enclosed.

Respectfully submitted,

Dated: July 18, 2001

James A. Henricks Registration No. 31,168

HENRICKS, SLAVIN & HOLMES LLP

840 Apollo Street, Suite 200 El Segundo, CA 90245-4737 310-563-1456 310-563-1460 (fax) jhenricks@hsh-iplaw.com (Email) Serial No.: Corresponds to PCT/AU98/01077

Atty. Ref. No.: 010100-101

CERTIFICATE OF MAILING

I hereby certify that this correspondence and all identified attachments are being deposited on June 23, 2000 with the United States Postal Service as Express Mail in an envelope with sufficient postage addressed to:

Box PCT

Assistant Commissioner For Patents

Washington, D.C. 20231

By: James A. Henricks, 31,168

EL388855022US

COPY

TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371

In Re Patent

Murdoch et al.

Application Of:

Serial Number:

Corresponds to PCT/AU98/01077

Filed:

June 23, 2000

Title:

A TRANSMITTER AND A METHOD FOR

TRANSMITTING DATA

Examiner: N/A

Group Art Unit: N/A

Box PCT Assistant Commissioner For Patents Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir:

Applicant submits herewith copies of patents, publications or other information of which they are aware, as listed on Form PTO-1449, that may be material to the examination of this Application, and in respect of which, there may be a duty to disclose. This information is from the Report of the International Preliminary Search Authority, a copy of which is enclosed.

Serial No.: Corresponds to PCT/AU98/01077

Atty. Ref. No.: 010100-101

The filing of this Information Disclosure Statement shall not be construed as a representation that a search has been made (37 C.F.R. 1.97(g)), an admission that the information cited is, or is considered to be, material to patentability, or that no other material information exists.

The filing of this Information Disclosure Statement shall not be construed as an admission against interest in any manner.

It is respectfully requested that the Examiner consider these references and make their consideration of record with the initial action.

The Commissioner is hereby authorized to charge any additional fees that may be required, or credit any overpayment, relating to this communication to Account No. 50-0655. A duplicate of this sheet is enclosed.

Respectfully submitted,

Dated: June 23, 2000

James A. Henricks Registration No. 31,168

HENRICKS, SLAVIN & HOLMES LLP

840 Apollo Street, Ste. 200 El Segundo, CA 90245-4737 310-563-1456 310-563-1460 (fax) ihenricks@hsh-iplaw.com (Email)

•

Enclosures

INTERNATIONAL SEARCH REPORT

PO BOX 200 WODEN ACT 2606

AUSTRALIA

Facsimile No.: (02) 6285 3929

International application No.

PCT/AU 98/01077 **CLASSIFICATION OF SUBJECT MATTER** Int C16: H04B 1/59, H04L 27/20 According to International Patent Classification (IPC) or to both national classification and IPC FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC: H04B, H04L, H03C, G01S Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) WPAT C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Category* Relevant to claim No. US 5481262 A (URBAS et al.) 2 January 1996 X Column 3 line 20 - column 4 line 9 1-4, 6-9 US 4899158 A (SAEKI et al.) 6 February 1990 X Column 2 line 58 - column 4 line 49 1, 2, 6, 7 EP 851639 A (LUCENT TECHNOLOGIES INC.) 1 July 1998 P,X Column 3 line 9 - column 9 line 12 1-4, 6-9 Further documents are listed in the See patent family annex continuation of Box C Special categories of cited documents: later document published after the international filing date or "A" document defining the general state of the art which is priority date and not in conflict with the application but cited to not considered to be of particular relevance understand the principle or theory underlying the invention "E" earlier application or patent but published on or after document of particular relevance; the claimed invention cannot the international filing date be considered novel or cannot be considered to involve an "L" document which may throw doubts on priority claim(s) inventive step when the document is taken alone or which is cited to establish the publication date of document of particular relevance; the claimed invention cannot another citation or other special reason (as specified) be considered to involve an inventive step when the document is "O" document referring to an oral disclosure, use, exhibition combined with one or more other such documents, such combination being obvious to a person skilled in the art "P" document published prior to the international filing date document member of the same patent family but later than the priority date claimed Date of the actual completion of the international search Date of mailing of the international search report -1 FEB 1999 20 January 1999 Name and mailing address of the ISA/AU Authorized officer **AUSTRALIAN PATENT OFFICE**

J. LAW

Telephone No.: (02) 6283 2179

INT RNATIONAL SEARCH REPORT

Information on patent family members

International application No. PCT/AU 98/01077

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member						
US	5481262	AU	81546/91	AU	55012/94	AU	55013/94	
		CA	2048385	СН	682782	DE	4125746	
		DE	4143561	FR	2667206	GB	2249001	
)		GB	2258588	GB	2258589	IT	1258003	
<i></i>		JP	2709758	JP	2747985	JP	2747986	
		NZ	239190	NZ	248087	NZ	2488088	
		US	5481262	US	5422636		·	
US	4899158	DE	3832409	FR	2621134	GB	2210538	
		JP	1084175	KR	9204754	JP	2655660	
		JP	2603672					
EP	851639	JP	10209914			<u>-</u>	· · · · · · · · · · · · · · · · · · ·	
GB	2314999	GB	9713696		••.			

END OF ANNEX

PATENT

Client Name & Docket RALDWIN SHELST Title: TRANSMITTER AND A ME Applicant: Murdoch et al	ON WATERS 010100-101 THOD FOR TRANSMITTING DATA
Ser.#/Pat.# 09/582,341	Filing Date: August 22, 2000
Please Acknowledge receipt of:	·
 Application having pages of specification and 	
claims, and	Request for Priority and Pri. Doc.
sheets of drawings, FIG(S)	/ - ' '
☐ Declaration / Oath	☐ Check #
☐ Power of Attorney	Request for Ext. of Time \$ 445,
Small Entity Statement	
☐ Check #	☐ Amendment After Final Rejection
□ Patent Assignment Cover Sheet O	☐ Check #
☐ Assignment	☐ Corrected Drawings sheets, FIG(S)
□ Check #	☐ Issue Fee Transmittal
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Mailed July 18, 2001	By Gloria Brass

Date/Time Local ID Local Name Company Logo 9-30-03;10:35AM 13105631460 HENRICKSSLAVINHOLMES

This document was confirmed.

(reduced sample and details below)

Document Size A4S

Serial Number: 09/582,341

Atty. Ref. No.: 010100-101

PATENT

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Openigholme for Petrote
POL 503 1450
Alfandhis, VA 22313-4450
By:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Patent
Application Of:
Strart Colin LTTTLECHILD

Serial Number: 09/582,341

Filed: Angust 22, 2000

Title: TRANSMITTER AND A METHOD FOR TRANSMITTING DATA

D. Pope Strain D. Pope Strainer: D. Pope Strainer

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

REQUEST FOR RECONSIDERATION OF HOLDING OF ABANDONMENT

Sir:

Applicant hereby requests reconsideration of the finding of abandonment for failure to respond to the Office Action dated January 18, 2001. Applicant's response entitled Response to Office Action Dated January 18, 2001, was filed July 24, 2001, along with a Petition for a three month extension of time. A copy of the response and extension of time are attached hereto, along with a copy of the stamped return post card showing the filing on that date.

Total Pages Scanned : 17 Total Pages Confirmed : 17

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1	402	17037465583	9-30-03;10:29AM	6'16"	17/ 17	EC		CP 14.4

Notes :

EC: Error Correct BC: Broadcast Send

CP: Completed HS: Host Scan HF: Host Fax RE: Resend MP: Multi-

MP: Multi-Poll RM: Receive to Memory

RM: Receive to Memory HP: Host Print HR: Host Receive PD: Poiled by Remote
PG: Poiling a Remote
DR: Document Removed

FO: Forced Output

MB: Receive to Mailbox PI: Power Interruption TM: Terminated by user WT: Waiting Transfer

FM: Forward Malibox Doc. WS: Waiting Send